REMARKS

In the Office Action ("OA")[1] mailed January 13, 2005, the Examiner rejected

claims 1-9 under 35 U.S.C. §102(e) as anticipated by U.S. Patent No. 6,289,102 to

Ueda et al. ("Ueda"); and rejected claims 10-14 under 35 U.S.C. §103(a) as being

unpatentable over Ueda. Applicants hereby cancel claims 10-14, without prejudice or

disclaimer, and amend claims 1-9. In view of the following remarks, Applicants

respectfully traverse the Examiner's rejections of the claims under 35 U.S.C. §§ 102(e)

and 103(a).

I. Response to Rejection Under 35 U.S.C. § 102(e)

The Examiner rejected claims 1-9 under 35 U.S.C. §102(e) as anticipated by

Ueda. In order to properly anticipate Applicants' claimed invention under 35 U.S.C.

§ 102, each and every element of the claim in issue must be found, either expressly

described or under principles of inherency, in a single prior art reference. Furthermore,

"[t]he identical invention must be shown in as complete detail as is contained in...the

claim." See M.P.E.P. § 2131 (8th Ed., Aug. 2001), quoting Richardson v. Suzuki Motor

Co., 868 F.2d 1126, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989). Finally, "[t]he

elements must be arranged as required by the claim." M.P.E.P. § 2131 (8th ed., 2001),

p. 2100-69.

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1 The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

Applicants begin with a discussion of amended claim 1. Claim 1 recites:

A mutual authentication method for use between a recording apparatus which records copied contents <u>in a memory card as</u> a removable recording medium having an arithmetic processing function, and the <u>memory card</u>, said method comprising:

storing, in <u>a first semiconductor memory in the memory card,</u> first information which depends on the <u>memory card;</u>

<u>storing, in a second semiconductor memory in the memory card,</u> second information which is to be shared by the recording apparatus in executing mutual authentication with the recording apparatus and depends on the <u>memory card</u>; and

generating, by the recording apparatus, authentication information used in mutual authentication with the <u>memory card</u> on the basis of the first information obtained from the <u>memory card</u>, and executing mutual authentication between the recording apparatus and the <u>memory card</u> using the generated authentication information and the second information, wherein executing the mutual authentication includes

generating a random number in the recording apparatus and transferring the random number to the <u>memory card</u>,

generating a first function in the recording apparatus using the generated authentication information and the generated random number,

generating a second function, <u>by the arithmetic processing function of the memory card,</u> using the generated second information and the transferred random number, and transferring the second function to the recording apparatus, and

comparing the generated first function with the generated second function in the recording apparatus.

Applicants respectfully submit that <u>Ueda</u> does not disclose or suggest the combination of steps recited in amended claim 1. For example, <u>Ueda</u> does not provide a teaching of at least the utilization of "<u>a memory card</u> as a removable recording medium <u>having an arithmetic processing function</u>" and "storing, in <u>a first semiconductor memory in the memory card</u>, first information which depends on the memory card; <u>storing, in a second semiconductor memory in the memory card</u>, second information which is to be shared by the recording apparatus in executing mutual authentication with the recording apparatus and depends on the memory card; and generating, by the

-13-

recording apparatus, authentication information used in mutual authentication with the memory card on the basis of the first information obtained from the memory card, and executing mutual authentication between the recording apparatus and the memory card using the generated authentication information and the second information, wherein executing the mutual authentication includes generating a random number in the recording apparatus and transferring the random number to the memory card, generating a first function in the recording apparatus using the generated authentication information and the generated random number, generating a second function, by the arithmetic processing function of the memory card, using the generated second information and the transferred random number, and transferring the second function to the recording apparatus, and comparing the generated first function with the generated second function in the recording apparatus," as recited in amended claim 1.

The Examiner alleges that Ueda teaches "a removable recording medium, an optical disk (col. 23 and col. 24, reference 607) that is removable from an optical disk drive" (OA, pg. 2). Although Ueda's optical disk may be a removable recording medium, such an optical disk does not constitute "a memory card as a removable recording medium having an arithmetic processing function" and "storing, in a first semiconductor memory in the memory card, first information which depends on the memory card; storing, in a second semiconductor memory in the memory card, second information which is to be shared by the recording apparatus in executing mutual authentication with the recording apparatus and depends on the memory card; and generating, by the recording apparatus, authentication information used in mutual authentication with the memory card on the basis of the first information obtained from the memory card, and

executing mutual authentication between the recording apparatus and the memory card using the generated authentication information and the second information, wherein executing the mutual authentication includes generating a random number in the recording apparatus and <u>transferring the random number to the memory card</u>, generating a first function in the recording apparatus using the generated authentication information and the generated random number, generating a second function<u>, by the arithmetic processing function of the memory card,</u> using the generated second information and the transferred random number, and transferring the second function to the recording apparatus, and comparing the generated first function with the generated second function in the recording apparatus," as recited in amended claim 1. Therefore, <u>Ueda</u> does not constitute at least a disclosure or suggestion of the limitations as recited in amended claim 1.

Next, in rejecting claims 10-14 under § 103(a), the Examiner took official notice that "memory cards are well known in the art to be removable recording mediums" (OA, pg. 10, ¶ 3). Applicants respectfully disagree. Even if a general memory card is merely applied to the <u>Ueda</u>'s disclosure, it would not have been, as alleged by the Examiner, "obvious to one of ordinary skill in the art at the time of the invention to utilize memory cards in order to extend RAM storage capacity or to transport information from one module to another" (OA, pg. 10, ¶ 3).

Applicants submit that the official notice, in which the Examiner alleges a memory card to be well known in the art to be removable recording mediums, fails to cure the deficiencies of <u>Ueda</u>. The memory card, as alleged in the Examiner's official notice, fails to teach "a memory card as a removable recording medium <u>having an</u>

arithmetic processing function" and "storing, in <u>a first semiconductor memory in the memory card</u>, first information which depends on the memory card; <u>storing, in a second semiconductor memory in the memory card</u>, second information which is to be shared by the recording apparatus in executing mutual authentication with the recording apparatus and depends on the memory card; and generating, by the recording apparatus, authentication information used in mutual authentication with the memory card on the basis of the first information obtained from the memory card, and executing mutual authentication between the recording apparatus and the memory card using the generated authentication information and the second information, wherein executing the mutual authentication includes generating a random number in the recording apparatus and <u>transferring the random number to the memory card</u>, generating a first function in the recording apparatus using the generated authentication information and the generated random number, generating a second function<u>, by the arithmetic processing function of the memory card,</u> using the generated second information and the transferred random number, and transferring the second function to the recording apparatus, and comparing the generated first function with the generated second function in the recording apparatus," as recited in amended claim 1.

Since <u>Ueda</u> fails to teach the elements of amended claim 1, Applicants submit that amended claim 1 is not anticipated by <u>Ueda</u>. For at least the foregoing reasons, Applicants submit that amended claim 1 is allowable over <u>Ueda</u> and request withdrawal of the rejection of amended claim 1 under 35 U.S.C. § 102(e). Because amended claims 3, 5, 7, and 9 are independent claims with limitations similar to those of amended

claim 1, Applicants further submit that amended claims 3, 5, 7, and 9 are also allowable over Ueda for at least the reasons given with respect to amended claim 1.

Moreover, Applicants submit that amended claims 2, 4, 6, and 8 are allowable, not only for the reasons stated above with regard to their respective allowable base claims, but also for their own additional features that distinguish them from the cited references. Accordingly, Applicants request withdrawal of the rejection of amended claims 2, 4, 6, and 8 under 35 U.S.C. § 102(e) and the timely allowance of these pending claims.

II. Response to Rejection Under 35 U.S.C. §103(a)

The Examiner rejected claims 10-14 under 35 U.S.C. §103(a) as being unpatentable over Ueda. Applicants hereby cancel claims 10-14 and incorporate the claims' limitations into claims 1-9.

III. **Conclusion**

In view of the foregoing remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: **April 12, 2005**   By:_____
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